

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A communication method for use in a communication network involving several user terminals communicating with at least one transmitter node, said transmitter node comprising a plurality of antennas, each of said user terminals comprising at least one antenna, said method being characterized by;
selecting a first set of user terminals comprising at least one user terminal
selecting a second set of user terminals not comprised in the first set
adapting first communication parameters for the first set of user terminals according to a first principle suitable for optimizing communication with the first set of user terminals,
adapting second communication parameters for the second set of user terminals according to a second principle which is different from the first principle, in response to communication parameters selected by the first set,
transmitting to the first set of user terminals according to the first communication parameters and to the second set of user terminals according to the second communication parameters.
2. (Original) A method according to claim 1, wherein the first principle involves optimization with respect to full or partial Channel State Information (CSI), for example by Singular Value Decomposition (SVD).

3. (Currently Amended) A method according to claim 1 ~~or 2~~, wherein the second principle makes use of opportunistic MIMO communication.

4. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1 wherein the first communication parameters are related to the transmit power and the beamforming matrix ~~(V)~~ at the transmitter side.

5. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1, comprising the step of selecting the first set of user terminals in dependence of traffic and quality of service parameters.

6. (Currently Amended) A method according to ~~any one of the claims~~ claim 1 ~~[[4]]~~, comprising the step of selecting the first set of user terminals in dependence of CSI knowledge.

7. (Currently Amended) A method according to ~~any one of the claims~~ claim 1 ~~[[4]]~~, comprising the step of selecting the first set of user terminals in dependence of receiver antenna configuration.

8. (Currently Amended) A transmitter node ~~(T4; T5)~~ for use in a MIMO based communication network involving several user terminals ~~(R41,..., R4K; R51,..., RSK)~~ communicating with the transmitter node, wherein each of said user terminals comprises at least one antenna, said transmitter node comprising a plurality of transmit

antennas arranged to transmit information to a plurality of receiver nodes, said

transmitter node comprising :

selection means for selecting a first set ~~(R41;R51, R52)~~ of user terminals comprising at least one user terminal and a second set ~~(R42,...,R4K ; R53,...,R5K)~~ of user terminals not comprised in the first set

first adaptation means ~~(91)~~ for adapting first communication parameters for the first set ~~(R41;R51, R52)~~ of user terminals according to a first principle suitable for optimizing communication with the first set of user terminals,

second adaptation means ~~(93)~~ for adapting second communication parameters for the second set ~~(R42,...,R4K ; R53,...,R5K)~~ of user terminals according to a second principle which is different from the first principle, in response to communication parameters selected by the first set,

transmit means for transmitting to the first set of user terminals according to the first communication parameters and to the second set of user terminals according to the second communication parameters.

9. (Currently Amended) A transmitter node according to claim 8, wherein the first adaptation means ~~(91)~~ is arranged to optimize communication with the first set ~~(R41;R51, R52)~~ of user terminals with respect to full or partial Channel State Information (CSI), for example by Singular Value Decomposition (SVD).

10. (Currently Amended) A transmitter node according to claim 8 or 9, wherein the second adaptation means ~~(93)~~ is arranged to optimize communication with the second

set of user terminals (~~R42,..., R4K; R53,..., R5K~~) according to opportunistic MIMO communication.

11. (Currently Amended) A transmitter node according to ~~any one of the claims~~claim 8-10, wherein the first communication parameters are related to the transmit power and the beamforming matrix (~~V~~) at the transmitter side.

12. (Currently Amended) A transmitter node according to ~~any one of the claims~~claim 8-11, comprising wherein the selection means is arranged to select the first set (~~R41; R51, R52~~) of user terminals in dependence of traffic and quality of service parameters.

13. (Currently Amended) A transmitter node according to ~~any one of the claims~~claim 8-11, wherein the selection means is arranged to select the first set (~~R41; R51, R52~~) of user terminals in dependence of CSI knowledge.

14. (Currently Amended) A transmitter node according to ~~any one of the claims~~claim 8-11, wherein the selection means is arranged to select the first set (~~R41; R51, R52~~) of user terminals in dependence of receiver antenna configuration.

15. (Currently Amended) A MIMO based communication network involving several user terminals communicating with at least one transmitter node, said transmitter node comprising a plurality of antennas, each of said user terminals comprising at least one

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antenna, characterized in that said at least one transmitter node is a transmitter node

according to ~~any one of the claims~~claim 8-14.